PHARMACEUTICAL INTEGRATED LOGISTICS
FROM PROCUREMENT TO PATIENT, MAXIMISE EFFICIENCY WHILE MINIMISING COSTS

MILCIS 2017
Building on the ADF’s Pharmaceutical and Medical Supply Procurement Process to Deliver a Better Healthcare Service for Members.
Technology Solutions Provider to the ADF since 1994

100% Australian owned SME
14 Countries and 10 Militaries
Operations management software – Canada, Finland, UK, France, Belgium, Saudi...
ADF Solutions – PILS, ULTRA-FP, MEMS, DITC
Software Engineering and Professional Services
Proven reputation for rapid and responsive delivery
PILS - HISTORY

- Idea created in 1999 after deployment to East Timor.
- ADF needed to deploy a large force for a significant time
- What medical supplies do they take?
- Spread over 38 pharmacies with their own databases
- What do they have?
- How long will it last?
- Too hard (buy all new stock)
- On return what do they do with stock?
PILLS -SOLUTION

- Continue to use FRED
- As used by most pharmacists
- Build a middleware layer that brings data together
- Keeps databases aligned and up to date
- Provides good stock management at the pharmacy
- Provides centralized control and reporting
PILS - A QUICK OVERVIEW

- Integrated logistics system for pharmacy and medical items
- Tracks and traces every pill from the purchasing to patient
- Used nation wide, at all ADF Pharmacies and medical units
- The Navy is currently trialing PILS on the 2 hospital ships
PILS - A QUICK OVERVIEW

- PILS is a system of systems
- Improves safety
- Improves efficiency
- Reduces stock management and admin
- Gives HealthSPO oversight, governance and control
- Provides full patient pharmaceutical history for every script, every member, network wide.
PILS tells you:

- Where stock is
- How much of it you have
- Who received it
- Including batch numbers & expiry dates
TRACK & TRACE ALL PHARMACEUTICALS & MEDICAL SUPPLIES
FROM PROCUREMENT TO PATIENT

Reduce Shrinkage
Reduce Wastage
Reduce Loss
Reduce Costs

Designed to be used by, and for organisations that procure, manage, and distribute large volumes of pharmaceutical and medical supplies, such as hospitals or defence forces.
PROVIDE GOVERNANCE & OVERSIGHT

 LINK THE SUPPLY CHAIN & CLINICAL RECORDS
The seamless integration between PILS and common dispensing systems ensures wholistic oversight to complete the loop between patient, doctor, script, and pharmacist.

 MAINTAIN A SINGLE PRODUCT CATALOGUE
Simplification and standardization of product names, ensures a single standards database, with consistent product descriptors ensuring tight procurement control.

 CORPORATE LEVEL VISIBILITY & REPORTING
Using SSRS reporting tools, head quarters are able to self serve, edit, and interact with information, within rights managed constraints, without having to rely on IT or IS resources.
PILS – USE CASE

PILS Electronic Ordering functionality was integrated with the prime vendor – Anspec. This gave pharmacies easy access to ordering while allowing Hlthspo full control, including:

• Just In Time Ordering
• Reduced Wastage
• Control over amounts being ordered.

• PILS was used to mandate the ordering and distribution of generic brands.
• This along with the ADF Formulary enabled more control of what Products could be purchased via the PILS system.
• This is just one example of how PILS saved Australia’s Defence Force $20m over just a 3yr period.
PILS – USE CASE

PAN Pharmaceuticals Recall

In 2003 the Federal Government’s medicine watchdog ordered an urgent recall of 219 products made and supplied by Pan Pharmaceuticals.

The Therapeutic Goods Administration (TGA) had suspended the licence of Pan Pharmaceuticals to manufacture medicines, because of serious concerns about the quality and safety of products manufactured by the company.

Due to the serious and widespread nature of the manufacturing problems identified at Pan, the TGA made the decision to recall all batches of medicines manufactured by Pan Pharmaceuticals Ltd from 1 May 2002 to 28 April 2003.

Every drug identified for recall was taken off the ADF Pharmacies shelves within 7 days and all items issued to Patients (with corresponding batch numbers) were returned.

Commercial pharmacies took as long as 3 months
BUILT FOR THE END USERS
A Vital System for Pharmacists

PRODUCT RECALLS
RAPID, ACCURATE, COMPLETE, RECALLS
Due to the ability to trace stock by any method required, and understand exactly where all stock is located, product recalls are able to managed efficiently and fast.

EASY STOCK AUDIT
TRACE STOCK BY BATCH, EXPIRY, OR TAG
The extensive auditing system enables rapid track and trace inventory management, for any point in the supply chain.

RAPID STOCK TAKES
STOCK TAKE ON THE FLY
PILS enables pharmacists to stock take on the fly, without costly and unproductive shut downs.

STOCK REDISTRIBUTION
MANAGE STOCK ACROSS MANY LOCATIONS
Understand where stock is located instantly, while simultaneously understanding consumption rates, and expiry dates. This enables easy stock redistribution.
PILS IMPROVES PATIENT SAFETY

PILS stores a full dispensing history for all patients

Database is constantly updated with interactions and allergies

PILS will alert if there are any drug interactions or allergies at the point of dispensing

Pharmacists can quickly see what has already been dispensed to a patient to avoid issues
The ADF-PPD is the central server:
- Imports medical information on drugs from the Surgeon General’s Australian Pharmaceutical Formulary
- Imports details of interactions from eMIMS and eAMH
- Disseminates patient data
- Controls product catalogue
- Provides reporting and administration
HOW DOES PILS WORK?

Pharmsc (Stock Control):
- Application and database at each base
- Allows network independence
- Provides all stock management
- Patient information
- Ordering
- Receipting
- Issuing
HOW DOES PILS WORK?

Dispensing software FRED:
- Pharmacy Guild Approved
- Alerts any interactions or allergies
- Provides compliance to dispensing protocols
- Labelling compliance
PILS – ON DEPLOYMENT

Anywhere a medical unit is deployed, PILS can be taken.

- PILS enables pharmacists to run a standalone pharmacy while on deployment, with full track and trace of all pharmaceuticals and equipment issued while on deployment.
- When the system is reconnected to the DRN all the data is synchronized.
- Ensure that a seamless record of all pharmaceuticals issued to personnel is maintained, covering recruitment to retirement, without long unexplained gaps.
- The system helps maintain pharmaceutical stock in the same way it is managed at home.
- On Exercise Talisman Sabre the Royal Australian Navy deployed PILS V3 on the HMAS Canberra, where it captured medication related data during the exercise.
- PILS V3 is also being applied in the current ADF Deployable Health Trial, and has been deployed on 15 defence laptops in field hospitals and deployable units to fill the gap in personnel health records that occur when soldiers and sailors are sent into the field.
PILS LATEST RELEASE

UPDATED TO .NET TECHNOLOGY
Allows for private, public, or hybrid cloud deployment, and assures continued interoperability with core ADF systems

REVISED PRODUCT ROADMAP
The product roadmap has been coordinated and agreed with the ADF and now runs for another 5 years.

VERSION 3 HAS BEEN IMPLEMENTED
In June of 2017, the implementation of version 3 was completed.

www.ocean.software
Ocean continues to collaborate with JHC & CIOG

- PILS will remain for at least another 5 years
- This will ensure PILS continues to be improved and sustained
- Ocean will conduct PILS User Groups
- Maintain a Capability Roadmap
- Provide a schedule of Releases
Innovations & Roadmap

- Reinstate integration with prime vendor – electronic ordering
- Transition to Web technology
- Integration with Corporate Systems
- Visibility of Rejected Orders
- DRN & DDRN – Connections for PILS & Fly-away kits
- HLTHSPO Alternative Product Selection
- Classification of Drugs Formulary and Non Formulary
- Stock Take Comments
- Stock Balance on Transactions
NEW CAPABILITY - TRIAL

- By integrating COT capability
- Provide ADF health professionals
- Secure platform for collaboration
- Share patient information
- Share notes and health records
- Real time messaging with patient context

- Links doctors, pharmacists and pathology
- Better health care for patients through collaboration
NEW CAPABILITY - TRIAL

- Web / cloud based
- Integrates with Medical Director
- Enables import of pathology reports
- Improved communication between all health care professionals
- Developed in Australia for Australian Medical Industry
- Live in Australia now!
- Ready to trial in ADF
- Australian Standards & Terminology
  - MyHealthRecord Certified
  - SNOMED standard naming
  - RACGP Computer and Information Security Standards complaint

PILS Central Server
PILS Middleware Secure Cloud

PILS
Fleet Manager
Pharmacists
Non ADF Pharmacists
ADF Members
Doctors
Mobile Doctors
x-rays & Pathology Reports
Medical Director
FRED
SUMMARY

- System of systems
- Tracks and traces every pill from the purchasing to patient
- Used nation wide, at all ADF Pharmacies and medical units
- Used in garrison health and on deployment
- It enables significant savings the cost of medication to ADF